

Ultraviolet Spectroscopy versus White Light observations of Coronal Mass Ejections

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The UltraViolet Coronagraph Spectrometer observed several tens of CMEs providing new insights into the classical white light scenario. Temperature, density, abundances, ionization stage, velocity along the line of sight can be determined. On the other side, the different perspectives provided by images in the UVCS spectral lines and LASCO white light can reveal the three dimensional velocity structure of a CME and constrain the magnetic topology.

Moreover, the UVCS observations, higher in the corona (≥ 1.5 Rsun), can be also compared to the early stage of a CME, detected by EIT, to investigate the temporal evolution of the ejected plasma and put constraints on the heating rate required to match the physical conditions obtained from the UVCS spectra.

We present a CME observed on Feb 12, 2000 by UVCS and LASCO along with the preliminary results of the analysis.